COCTAILS: Automated Interlibrary Loan Statistics at Health Sciences Library, SUNYAB

By Michelle D. O'Connell

Assistant Head of Information Services/Programmer Analyst
Health Sciences Library

A. Patricia Miller*

School of Information and Library Studies
State University of New York at Buffalo
Buffalo, New York

ABSTRACT

An automated interlibrary loan statistics compilation system used at the Health Sciences Library at the State University of New York at Buffalo is described. The system provides standardized input to produce various statistical reports as well as additional information for collection development and improved user service.

THE Health Sciences Library (HSL) at the State University of New York at Buffalo (SUNYAB) is the resource library for its five schools in the health sciences: medicine, dentistry, pharmacy, nursing, and the health-related professions. In addition, the library serves the School of Health Education and the Department of Biology. HSL is a subcontractor of the regional medical library for Region II and as such is responsible for filling the library needs of approximately 12,000 health professionals in the eight counties of western New York.

HSL processes interlibrary loan (ILL) borrowing and lending requests. During the 1974–1975 fiscal year approximately 30,000 requests were processed. HSL cooperates with several interlibrary loan networks, including the Western New York Library Resources Council and the regional medical library network. Each of the networks requires its own statistical reports with categories of requests, which are defined differently by each network. HSL keeps other kinds of statistics for its own use and also reports on ILL statistics to the university libraries of SUNYAB. Therefore, HSL's interlibrary loan processing is partitioned into four divisions:

1. Division A processes requests received from and submitted to Bell Science Library, a satellite and storage facility for Health Sciences Library. Division A also processes requests from the Western New York Library Resources Council.
2. Division B processes requests received from the four area teaching hospitals. Requests reimbursable by the regional medical library that are received from other Region II subcontractors either by mail or TWX are also processed, as well as requests from miscellaneous commercial firms and libraries throughout the country.
3. Division C processes the majority of requests for the Information Dissemination Service of HSL, except those of the four hospitals handled by Division B. Division C serves the regional medical library requests of the health professionals of approximately 100 institutions by providing books, journals, and literature searches. The requests come in mainly by mail.
4. Division D processes the interlibrary loan borrowing requests made in person by the faculty and students affiliated with SUNYAB.

Prior to 1974, the statistics for each division were tallied manually, resulting in conflicting figures and a high degree of inaccuracy, as well as staff frustration and time loss. When the staff was asked to review the previous year's ILL requests to fill a nonroutine report, they performed the extremely time-consuming task of manually pulling and sorting the requests into the necessary categories. As a result of these problems and frustrations, it was agreed that the ILL statistical compilations should be automated.

*Now Information Specialist, Marathon Oil Company, Littleton, Colorado.

Since the spring of 1974, Divisions A and D (except for the Western New York Library Resource Council's statistics) have been automated through COCTAILS (Chelle O'Connell's Totally Automated Interlibrary Loan Statistics) as described in this paper. At the present time the manual statistics of Divisions B and C are being revised. Upon the completion of the formats, the statistics for these divisions will also be automated.

Computer Facilities

HSL has access to a CYBER 173 computer through university computing services at SUNYAB. Remote job processing is possible through the use of HSL's TWX and Execuport 300 terminals under the NOS 1.1 operating system.

Input

The library staff involved in interlibrary loan was consulted to determine what data were necessary for compilation of the statistics. The statistical report forms were examined and the staff was asked to suggest any other categories of information that should be recorded. It was decided that the total number of characters for the data elements should not exceed eighty so that the information could be stored on punched cards for backup. Each data element was to be represented by a numerical code, and the number of columns necessary to accommodate all of the numerical codes was determined. A *Manual of Numerical Codes* was established and a tentative interlibrary loan recording form (ILRF) was designed. The data elements were grouped so that the type of material, International Standard Serial Number (ISSN), and date of publication would appear close to each other for ease of completion of the form. Codes were established for the requester's institutional and departmental affiliation, and for the institution to which a request is ultimately referred. Numbers were consecutively created for each journal for which an ISSN could not be found.

The clerical personnel in the four divisions were given the *Manual of Numerical Codes* with an explanation of the use of the ILRF. Each ILL request was checked against the corresponding ILRF for errors, and a hand-out, *Common Mistakes in Filling Out the ILRF,* was distributed. During this period, numerical codes were assigned to any new information and several additional fields were added to the ILRF to make its format final. (See Table 1.)

Currently the ILRFs are completed for each processed request, whether filled, cancelled, or rejected. Each month a new file is created for each division's requests. (See Table 2.) The ILRFs are the records that make up the monthly file. The eighty characters of data from each ILRF are keyed in weekly on the terminal as a single line of input.

Processing and Output

Each month the input files are run against COBOL programs for processing. COBOL was chosen because there had been some discussion concerning a switch to the university computing service's UNIVAC computer, which has only a COBOL compiler. The programs were developed, written, run against sample data, and debugged before using actual data. For added assurance that the programs were functioning properly, the automated system was run in parallel with the manual system for three months. The final programs are now stored on disc as permanent files, and the ILRFs which have been entered are stored on disc in the monthly file for each division. After the monthly statistics are generated, the ILRFs are punched onto cards and purged from the disc. All files are run against an error program designed to detect incomplete or incorrect data elements for each line of input. Defective lines are corrected and reentered, and the files are then ready for statistics processing.

Division A statistics are divided into two categories: material that Bell borrows from HSL and material that HSL borrows from Bell. In the first category, the program tallies the total number of requests filled. Both filled and unfilled requests are divided by type of material: journal, book, thesis, microform, film, audiotape, phonodisc, slide, pamphlet, and other. The photocopy requests are reported by number of requests and number of pages photocopied. The breakdown for the material that HSL borrows from Bell is much simpler. Only those requests that have been filled are counted. The filled requests are broken down by type of material in a manner similar to that for the lending statistics. Photocopy requests are again divided into number of requests and number of pages. (See Table 3).

Division D statistics are divided into two categories: libraries that material has been borrowed from, and the type of material borrowed. In addition, the total number of filled requests for the month is calculated. The number of unfilled requests, divided into either "cancelled-by-pa-

TABLE 1

INTERLIBRARY LOAN RECORDING FORM

Col. 1–13 ☐☐☐☐☐☐☐☐☐☐☐☐☐ Transaction Number

Col. 16–18 ☐☐☐ Institution Code

Col. 20–21 ☐☐ Department Code

Col. 24–25 ☐☐ Requester Code:

01 Physician	06 Social Service	13 Student, Undergrad.
02 Researcher	07 Paraprofessional	14 Staff
03 Dentist	09 Not Available	15 Library replace.
04 Nurse	11 Faculty	16 Reserve
05 Educator	12 Student, Grad.	19 Other

Col. 28 ☐ How request was received:

1 Mail	3 TWX	5 In Person
2 Phone	4 Courier	6 Other

Col. 31–32 ☐☐ Type of material:

01 Journal	05 Microform	09 Slides
02 Book	06 Film	10 Pamphlets
03 Photocopy	07 Audiotape	19 Other
04 Thesis	08 Phonodisc	

Col. 34–41 ☐☐☐☐☐☐☐☐ ISSN

Col. 44–46 ☐☐☐ Journal Year

Col. 49–51 ☐☐☐ Number of Sheets Copied

Col. 54 ☐ Reason for delay in filling, or Reason for borrowing:

1 at bindery	3 not yet recd.	5 not held
2 in circulation	4 missing	6 unable or difficult to verify

Col. 57–58 ☐☐ Disposition within HSL:

10 RML 11 IDS

Col. 61–62 ☐☐ A. Processing Time (in house)

Col. 64–66 ☐☐☐ B. Processing Time (receipt of document)

Col. 67 ☐ Number of referrals

Col. 69–71 ☐☐☐ Institution borrowed from, or Institution referred to:

Col. 73–74 ☐☐ Final Request Status:

01 Cancelled by requester	04 Requester ineligible	07 Material ineligible for ILL
02 Cannot fill	05 Incorrect citation	08 Referred
03 Never published	06 Incomplete citation	09 Filled

Col. 77 ☐ Division which is processing request:

1 Division A	3 Division C
2 Division B	4 Division D

TABLE 2

MONTHLY FILE

			040	03	11	5	03	00458511	933	002	5	1 021 09 4
			040	03	11	5	03	00458511	942	003	5	1 021 09 4
			040	03	11	5	03	00458511	946	004	5	1 021 09 4
HSL	D	03 121	060		12	5	03	0000382A	975	004	5	1 030 09 4
HSL	D	03 082	170	02	12	5	03	00178934	969	004	5	1 031 09 4
HSL	D	03 069	060	03	12	5	03	00041947	973	005	5	1 031 09 4
HSL	D	03 076	060	03	12	5	03	00442178	973	004	5	1 031 09 4
HSL	D	03 083	040	01	12	5	03	00180181	950	007	5	1 031 09 4
HSL	D	03 052	040	03	11	5	03	0000492A	960	005	5	1 031 09 4
HSL	D	03 049	040	03	11	5	03	00379085	940	009	5	1 031 09 4
HSL	D	03 107	040	28	11	5	03	00810746	974	005	5	1 031 09 4
HSL	D	03 105	040	03	11	5	03	00040096	937	004	5	1 031 09 4
HSL	D	03 108	040	17	11	5	03	00903019	975	002	5	1 031 09 4
HSL	D	03 106	040	04	11	5	03	0006307X	952	005	5	1 031 09 4
HSL	D	03 099	999		11	5	03	0000087B	958	020	5	1 032 09 4

TABLE 3

DIVISION A STATISTICS

Material Bell borrowed from HSL	
Total number of requests	
Received	157
Filled	140
Not filled	
Journals	14
Books	3
Theses	0
Microforms	0
Films	0
Audiotapes	0
Phonodiscs	0
Slides	0
Pamphlets	0
Other	0
Filled	
Journals	2
Books	1
Theses	0
Microforms	0
Films	0
Audiotapes	0
Phonodiscs	0
Slides	0
Pamphlets	0
Other	0
Xerox requests	
No. of requests	137
No. of pages	1,170
Material borrowed from Bell	
Journals	0
Books	0
Theses	0
Microforms	0
Films	0
Audiotapes	0
Phonodiscs	0
Slides	0
Pamphlets	0
Other	0
Xerox requests	
No. of requests	1
No. of pages	11

TABLE 4

DIVISION D STATISTICS

Libraries HSL borrowed from:	
Downstate	0
N.J. Coll. Med. & Dent.	4
Rochester Medical	0
Upstate	10
RML	5
NLM	16
NYAM direct	0
NYAM via NYSL	13
NYSL	8
NYSL referrals	9
SUNYAB	0
Other SUNY	25
BECPL	6
Buff. Mus. of Sci.	0
SUNY College at Buffalo	3
Roswell	6
Other local	3
All others	25
Total for month	133
Type of material HSL borrowed:	
Photocopies	101
Journals	1
Books	25
Theses	4
Microforms	2
Films	0
Audiotapes	0
Phonodiscs	0
Slides	0
Pamphlets	0
Other	0
Cancelled or unfilled	13
Ineligible	20
HSL borrowing service statistics	
Requests filled by loan:	
WNYLRC	4
NYSILL	6
RML	10
Non-network	11
ILL–total	31
IRL–SUNYAB	0
IRL–total	0
Requests filled by photocopy:	
WNYLRC	5
NYSILL	24
RML	22
Non-network	51
ILL–total	102
IRL–SUNYAB	0
IRL–total	0

tron" or "ineligible," is also computed. The report concludes with a statistical breakdown by network accessed. (See Table 4.)

OVERVIEW AND FUTURE DEVELOPMENTS

Statistical reports are produced quickly and accurately under the COCTAILS system, and staff time can be spent processing ILL requests rather

than tallying them. Reports generated conform to required forms, but can be adapted easily to include any changes in the report form.

System disadvantages are related currently to the cumbersome backup mode of punched cards. Plans are being made to use magnetic tape, thus eliminating storage and manipulation problems. Also, the use of a standardized request form in Division A requires the coding of a separate ILRF, a problem which was eliminated in Division D by incorporating the coding sheet on the request form. The separation of the original information from the coded data makes correction of the error file a more time-consuming task.

The information recorded from each ILL request can be used for purposes other than statistics-keeping. Knowledge of frequently borrowed journal titles would aid in collection development not only for HSL, but also for the hospital libraries it serves. Chronological breakdowns of materials used could aid the weeding, cancellation, and storage processes. Eventually, journal names can be matched to location held to generate a ready-list to aid the referral process for ILL requests.

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